

IN THE SPECIFICATION

Please amend the paragraph starting on page 13, line 16 as follows:

One embodiment of the present invention involves the automatic setting of the rate-response curve breakpoint at the anaerobic threshold as determined by the point at which an oscillatory minute ventilation pattern disappears when a patient exercises with increasing intensity. The embodiment comprises: 1) measuring minute ventilation values and determining that an average of those minute ventilation values are increasing, signifying that the patient's exertion level is increasing; 2) determining an amplitude of an oscillatory component in the measured minute ventilation values to be above a specified threshold value; and, 3) if the amplitude of the oscillatory component falls below the specified threshold value as the average minute ventilation continues to increase, setting the breakpoint of the rate response curve equal to the presently measured minute ventilation value. Fig. 4 illustrates an exemplary implementation of the method. At step A1, the minute ventilation signal MV is input to a bandpass filter that extracts the frequency components of the signal that are between approximately .01 and .05 Hz. This corresponds to the frequency of oscillations in minute ventilation that have been found to occur in heart failure patients. At step A2, the mean amplitude of the extracted frequency components are calculated, and this value is compared to a specified threshold value at step A3. If the amplitude of the oscillations is below the threshold, the slope of the rate-response curve is programmed at step A4 to a value corresponding to what is appropriate when the patient is exercising above the anaerobic threshold. If the amplitude of the oscillations is above the threshold, the slope of the rate-response curve is set to a value appropriate for exercise below the anaerobic threshold at step A5. The sensor-indicated rate is calculated by processing the MV signal at step A8, setting the slope of the rate-response curve at step A6 in accordance with the results of either step A5 or step A4, and mapping of the minute ventilation to a sensor-indicated rate at step A7.